

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/095292 A1

(51) International Patent Classification⁷:

C02F 11/14

(21) International Application Number:

PCT/EP2005/002078

(22) International Filing Date: 28 February 2005 (28.02.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0405506.7 12 March 2004 (12.03.2004) GB

(71) Applicant (for all designated States except US): **CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED** [GB/GB]; Cleckheaton Road, Low Moor, Bradford, West Yorkshire BD12 0JZ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WHITTAKER, Tony** [GB/GB]; 11 Petrel Close, Clayton Heights, Bradford, West Yorkshire BD6 3YB (GB). **NORMAN, Peter** [GB/GB]; 35 Lumb Lane, Roberttown, Liversedge, West Yorkshire, WF15 7NQ (GB). **SMITH, Darryl** [GB/GB]; 25 Becketts Close, Heptonstall, Hebden Bridge, West Yorkshire, HX7 7LJ (GB).

(74) Common Representative: **CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED**; Patents Department, Cleckheaton Road, Low Moor, Bradford, West Yorkshire BD12 0JZ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/095292 A1

(54) Title: PROCESS FOR THE DEWATERING OF AQUEOUS SUSPENSIONS

(57) Abstract: A process of dewatering an aqueous suspension comprising treating the suspension with a dewatering amount of a reverse phase polymer, and subjecting the suspension to a mechanical dewatering to form a cake, characterised in that the reverse phase polymer only partially inverts to bring about flocculation and thickening of the suspension, and then fully inverts during the further dewatering to form a cake.